PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY To: PCT MITCHELL W. SHAPIRO MILES & STOCKBRIDGE P.C. 1751 PINNACLE DRIVE JAN 1 8 2005 SUITE 500 WRITTEN OPINION MILES & STOCKBRIDGE P.C. MCLEAN, VIRGINIA 22102 TYSONS CORNER (PCT Rule 66) Date of Mailing 1:3 JAN 2005 (day/month/year) REPLY DUE Applicant's or agent's file reference within 2 months/days from F-10048-PCT the above date of mailing International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/US03/32158 09 October 2003 (09.10.2003) 09 October 2002 (09.10.2002) International Patent Classification (IPC) or both national classification and IPC IPC(7): H03L 07/08, 07/14 and US Cl.: 331/14, 17, 25 Applicant ACRON PACKET SOLUTIONS, LLC This written opinion is the first (first, etc.) drawn by this International Preliminary Ex 1. 2. This opinion contains indications relating to the following items: Basis of the opinion П **Priority** Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Ш Lack of unity of invention Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VΙ Certain documents cited Certain defects in the international application VII VIII Certain observations on the international application The applicant is hereby invited to reply to this opinion. 3. When? See the time limit indicated above. The applicant may; before the expiration of that time limit, request this Authority to grant an extension. See rule 66.2(d). How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9. For an additional opportunity to submit amendments, see Rule 66.4. Also For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6 If no reply is filed, the international preliminary examination report will be established on the basis of this opinion. 4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 09 February 2005 (09.02.2005) Name and mailing address of the IPEA/US Authorized officer Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. (571)272-1650 Facsimile No. (703) 305-3230

Form PCT/IPEA/408 (cover sheet)(July 1998)

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International application No.
PCT/US03/32158

| I. | Basis of the opinion |
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| ı. | With regard to the elements of the international application:* |
| | the international application as originally filed the description: pages 1-15, as originally filed pages NONE, filed with the demand |
| | pages NONE, filed with the letter of the claims: pages 16-20, as originally filed pages NONE, as amended (together with any statement) under Article 19 pages NONE, filed with the demand pages NONE, filed with the letter of the drawings: pages 1-7, as originally filed pages NONE, filed with the demand pages NONE, filed with the letter of |
| | the sequence listing part of the description: pages NONE, as originally filed pages NONE, filed with the demand pages NONE, filed with the letter of |
| 2. | With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language which is: the language of a translation furnished for the purposes of international search (under Rule23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination(under Rules 55.2 and/or 55.3). |
| 3. | With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing: contained in the international application in printed form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listin has been furnished. |
| 4. 5. | The amendments have resulted in the cancellation of: the description, pages NONE the claims, Nos. NONE the drawings, sheets/fig NONE This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)). |
| | eplacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to it opinion as "ori ginally filed." |

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| V. Reasoned statement under Rule 66.2(a)(ii) citations and explanations supporting sucl | | | inventive step or | industrial applicability; |
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| 1. STATEMENT | <u></u> | | | |
| Novelty (N) | | | | |
| Inventive Step (IS) | | | | |
| Industrial Applicability (IA) | | | | |
| | Claims | NONE | | NO |
| Claims NONE NO EXPLANATIONS Claims 1-17 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest generating a new signal based on the stored pulse width property measurement to maintain the frequency of the voltage controlled oscillator; generating a new signal based on the stored pulse width property from the memory module and to generate a new signal based thereon; using the stored pulse width property generate a calibration reference signal which can be supplied to the phase detector; using the stored pulse width property to generate a calibration reference signal which can be supplied to the phase detector; using be stored pulse width property to generate a reference signal to be supplied to the phase detector when the input phase signal is lost or becomes unsuitable for proper operation of the phase-locked loop; determining whether the potential clock reference would lock the phase-locked loop from the determined relative frequency measurement and the determined VCO frequency output Claims 1-17 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry. | | | | |

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| VII. Certain defects in the international application | | | |
| The following defects in the form or contents of the international application | ion have been noted: | | |
| Claims 13-17 are objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof: Claims 13 to 17 should be renumbered as claims 12 to 16 because "12" was not used as a claim number and thus claims 13 to 17 do not comply with PCT Rule 6.1(b) "If there are sev eral claims, they shall be numbered consecutively in Arabic numerals". | | | |
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| Supplemental Box (To be used when the space in any of the preceding boxes is not sufficient) | | | | |
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| TIME LIMIT: The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report. | | | | |
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